

Application: 09/806,510

Attorney Docket No. 012.P11006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the current application:

Listing of the claims:

Claim 1 - Claim 86 (Canceled)

Claim 87 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, said method comprising:

encrypting said decrypted digital data using a changeable key to produce changeable key re-encrypted digital data;

encrypting said changeable key re-encrypted digital data using an unchangeable key to produce changeable-unchangeable keys double re-encrypted digital data to be stored, copied or transferred;

decrypting said copied, stored or transferred changeable-unchangeable keys double re-encrypted digital data using said unchangeable key to said changeable key re-encrypted digital data; and

decrypting said changeable key re-encrypted digital data using said changeable key to said decrypted digital data.

Claim 88 (New) The method of claim 87 wherein said unchangeable key may be in a device.

Claim 89 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, comprising:

encrypting said decrypted digital data using an unchangeable key to produce unchangeable key re-encrypted digital data;

encrypting said unchangeable key re-encrypted digital data using a changeable key to produce unchangeable-changeable key double re-encrypted digital data to be stored, copied or transferred;

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decrypting said copied, stored or transferred unchangeable-changeable keys double re-encrypted digital data using said changeable key to said unchangeable key re-encrypted digital data; and

decrypting said unchangeable key re-encrypted digital data using said unchangeable key to said decrypted digital data.

Claim 90 (New) The method of claim 89 wherein said unchangeable key may be in a device.

Claim 91 (New) The method according to claim 87 or 89, wherein said encrypting and decrypting using said changeable key are carried out by a software.

Claim 92 (New) The method according to claim 87 or 89, wherein said encrypting and decrypting using said changeable key are carried out by a hardware.

Claim 93 (New) The method according to claim 88 or 90, wherein said changeable key is supplied externally from said device.

Claim 94 (New) The method according to claim 88 or 90, wherein said changeable key is generated in said device.

Claim 95 (New) The method according to claim 88 or 90, wherein said encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 96 (New) The method according to claim 87 or 89, wherein said encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 97 (New) The method according to claim 88 or 90, wherein said unchangeable key is already placed in said device.

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Claim 98 (New) The method according to claim 88 or 90, wherein said unchangeable key is generated in said device.

Claim 99 (New) The method according to claim 88 or 90, wherein said unchangeable key is supplied externally from said device.

Claim 100 (New) The method according to claim 88 or 90, wherein said unchangeable key is specific to said device.

Claim 101 (New) The method according to claim 88 or 90 wherein said unchangeable key is not specific to said device.

Claim 102 (New) An apparatus for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, said apparatus comprising:

a changeable key encryption unit for encrypting said decrypted digital data using a changeable key to produce changeable key re-encrypted digital data;

an unchangeable key encryption unit for encrypting said changeable key re-encrypted digital data using an unchangeable key to produce changeable-unchangeable keys double re-encrypted digital data to be stored, copied or transferred;

an unchangeable key decryption unit for decrypting said copied, stored or transferred changeable-unchangeable keys double re-encrypted digital data using said unchangeable key to said changeable key re-encrypted digital data; and

a changeable key decryption unit for decrypting said changeable key re-encrypted digital data using said changeable key to said decrypted digital data.

Claim 103 (New) The apparatus of claim 102 wherein said unchangeable key may be in a device.

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Claim 104 (New) An apparatus for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from encrypted digital data, said apparatus comprising:

an unchangeable key encryption unit for encrypting said decrypted digital data using an unchangeable key to produce unchangeable key re-encrypted digital data;

a changeable key encryption unit for encrypting said unchangeable key re-encrypted digital data using a changeable key to produce changeable-unchangeable keys double re-encrypted digital data to be stored, copied or transferred;

a changeable key decryption unit for decrypting said copied, stored or transferred changeable-unchangeable keys double re-encrypted digital data using said changeable key to said unchangeable key re-encrypted digital data; and

an unchangeable key decryption unit for decrypting said unchangeable key re-encrypted digital data using said unchangeable key to said decrypted digital data.

Claim 105 (New) The apparatus of claim 104 wherein said unchangeable key may be in a device.

Claim 106 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said changeable key are carried out by a software.

Claim 107 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said changeable key are carried out by a hardware.

Claim 108 (New) The apparatus according to claim 103 or 105, wherein said changeable key is supplied externally from said device.

Claim 109 (New) The apparatus according to claim 103 or 105, wherein said changeable key is generated in said device.

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Claim 110 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said unchangeable key are carried out by a software.

Claim 111 (New) The apparatus according to claim 102 or 104, in which encrypting and decrypting using said unchangeable key are carried out by a hardware.

Claim 112 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is already placed in said device.

Claim 113 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is generated in said device.

Claim 114 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is supplied externally from said device.

Claim 115 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is specific to said device.

Claim 116 (New) The apparatus according to claim 103 or 105, wherein said unchangeable key is not specific to said device.

Claim 117 (New) A method for protecting decrypted digital data from illegitimate use, said decrypted digital data being decrypted from digital data encrypted using a first changeable key, said method comprising:

encrypting said decrypted digital data using a second changeable key to produce second changeable key re-encrypted digital data;

encrypting said second changeable key re-encrypted digital data using an unchangeable key to produce unchangeable second changeable keys double re-encrypted digital data to be stored;

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decrypting said stored unchangeable-second changeable keys double re-encrypted digital data using said unchangeable key to said second changeable key re-encrypted digital data;

encrypting said second changeable key re-encrypted digital data using a third changeable key to produce third changeable-second changeable keys double re-encrypted digital data to be copied or transferred;

decrypting said copied or transferred third changeable-second changeable keys double re-encrypted digital data using said third changeable key to said second changeable key re-encrypted digital data; and

decrypting said second changeable key re-encrypted digital data using said second changeable key to said decrypted digital data.

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